Panasonic recommends Windows Vista™ Business.

TOUGHBOOK®

toughbook 51

Full-featured Desktop Alternative

- *Large 15" Display for Group Presentations*
- *Full Magnesium Alloy Case*
- *Shock-mounted, Removable HDD*
- *TPM and Optional SmartCard for Added Security*
- *Intel® Centrino® Duo Mobile Technology*

toughbook 51

Panasonic
ideas for life

TOUGHBOOK®

toughbook 51

Full-featured Desktop Alternative

Panasonic recommends Windows Vista™ Business.

SOFTWARE
- Genuine Windows Vista™ Business
- Setup, On-line Reference Manual, Adobe® Reader

CPU
- Intel® Core™ Duo Processor T2500:
  - 2MB L2 cache
  - Processor speed 2.0GHz
  - 667MHz FSB
- Intel® Core™ Duo Processor T2300:
  - 2MB L2 cache
  - Processor speed 1.66GHz
  - 667MHz FSB

STORAGE & MEMORY
- Intel® Core™ Duo Processor T2500:
  - 512MB SDRAM (DDR2) standard, expandable to 4GB*; or 1GB SDRAM (DDR2) standard, expandable to 4GB*
  - 80GB HDD (shock-mounted & easily removable)
- Intel® Core™ Duo Processor T2300:
  - 512MB SDRAM (DDR2) standard, expandable to 4GB*
  - 60GB HDD (shock-mounted & easily removable)

DISPLAY
- Intel® Core™ Duo Processor T2500:
  - 15" 1600 x 1200 (UXGA) TFT Active Matrix Color LCD
  - ATI Mobility Radeon® x1300, 128MB or 256MB VRAM
- Intel® Core™ Duo Processor T2300:
  - 15" 1024 x 768 (XGA) TFT Active Matrix Color LCD
  - Intel® GMA 950 graphic controller, UMA (Unified Memory Access) up to 128MB

AUDIO
- Intel® High Definition Audio Compliant
- SigmaTel™ STAC9200
- Integrated stereo speakers
- Convenient keyboard volume and mute controls

EXPANSION SLOTS
- PC Card Type II x 2 or Type III x 1
- Secure Digital (SD) Card x1

MULTIMEDIA POCKET
- 1.44MB FDD standard
- Combo Drive (DVD-ROM/CD-R/RW) or DVD Multi Drive (DVD-RAM/DVD-ROM/DVD-RW/CD-R/CD-ROM/CD-RW) standard
- Will accept optional second battery

KEYBOARD & INPUT
- 87-key with dedicated Windows® key
- Electrostatic touchpad with scrolling support

WIRELESS LAN
- Intel® PRO/Wireless 3945ABG network connection 802.11a/b/g
- Security
  - Authentication: LEAP, WPA, 802.1x, EAP-TLS, EAP-FAST, PEAP
  - Encryption: CKIP, TKIP, 128-bit and 64-bit WEP, Hardware AES

INTERFACE

External Keyboard/Mouse	Mini-DIN 6-pin
External Video	D-sub 15-pin
Headphones/Speaker	Mini-jack Stereo
IEEE 1394 (Firewire)	4-pin
Microphone/Line In	Mini-jack Stereo
Port Replicator	Dedicated 100-pin
Serial	D-sub 9 pin (UART 16550 compatible)
USB 2.0 (x4)	4-pin
10/100/1000 Ethernet	RJ-45
56Kbps Modem	RJ-11

POWER SUPPLY
- Lithium Ion battery pack (11.1V, 7650mAh)
- Battery operation: 6 hours**
- Battery charging time: approximately 4.5 hours**
- AC Adapter: AC 100V-240V 50/60Hz, Auto Sensing/Switching worldwide power supply
- Pop-up on-screen battery status reporting

POWER MANAGEMENT
- Suspend/Resume Function, Hibernation, Standby, ACPI BIOS

SECURITY FEATURES
- Password Security: Supervisor, User, Hard-Disk Lock
- Cable lock slot
- Trusted Platform Module (TPM) 1.2

WARRANTY
- 3-year limited warranty, parts & labor

DIMENSIONS & WEIGHT
- 1.9" (H) x 12.8" (W) x 10.9" (D)
- 6.8 lbs.

- *Large 15" Display for Group Presentations*
- *Full Magnesium Alloy Case*
- *Shock-mounted, Removable HDD*
- *TPM and Optional SmartCard for Added Security*
- *Intel® Centrino® Duo Mobile Technology*

INTEGRATED OPTIONS***
- SmartCard Reader
- Bluetooth® v2.0
- Fingerprint Scanner
- DVD Multi Drive (DVD-RAM/DVD-RW/CD-R/RW)

ACCESSORIES

AC Adapter (3 pin)	CF-AA1683AM
Battery Charger	CF-VCBTB1U
ComFolio Universal Carrying Case (large capacity)	COMUNIV-P
ComFolio Universal Jr. Carrying Case	COMUNIVJR-P
Desktop Port Replicator	CF-VEB512W
Lithium Ion Battery Pack	CF-VZSU29AU
Lithium Ion Battery Pack for Multimedia Pocket	CF-VZSU1473U
Memory Cards	
– 512MB	CF-WMBA5512
– 1GB	CF-WMBA501G
Mobile Data Wireless Display	CF-VDW07CHM
ToughMate CF51 Always-on Case	CF-FM5051
Large Venue DLP Projector	PT-DW5000U
Mobile LCD Projector	PT-LB50U

toughbook 51

*Total useable memory will be less depending upon actual system configuration

**Battery performance features such as charge time and life span can vary according to the conditions under which the computer and battery are used. Battery operation and recharge times will vary based on many factors including screen brightness, applications, features, power management, battery conditioning and other customer preferences. Battery testing results from BatteryMark v.4.0.1, minimum brightness.

***Integrated Options may vary depending on your notebook configuration. Please consult your reseller or Panasonic representative before purchasing.

For more information call 1-800-662-3537 or visit us on the Web at panasonic.com/toughbook.

Panasonic is constantly enhancing product specifications and accessories. To find the most up-to-date information on the Toughbook 51, please visit our website. Specifications subject to change without notice. Trademarks are property of their respective owners. ©2007 Panasonic Corporation of North America. All rights reserved.

intel Centrino Duo

Panasonic ideas for life